

The Berkeley Water Center (BWC)

Microsoft TCI Kick-Off mtg

Yoram Rubin



Motivation

Hydrology was driven until recently primarily by the narrowly focused issues of water supply.

The 20th Century water paradigm is inadequate in the face of the increase in number, severity, complexity, and the scale of the water-related problems that we now face: a much broader context is needed.

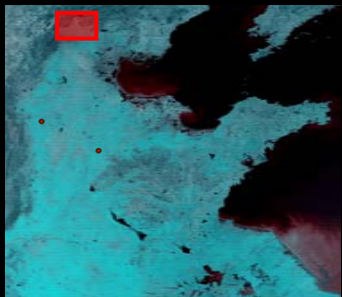
California is experiencing water stress earlier than many states in the Nation and whose water issues threaten California economy and vitality



Global



Regional



Watershed



Field



Station



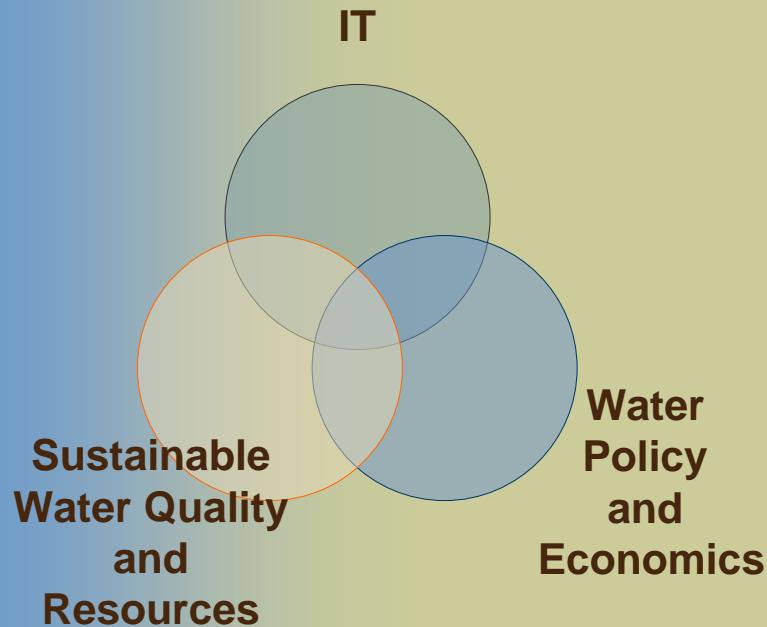
The Concept

Effective water management is not purely a scientific problem, a political problem, a technological problem, a computer science problem nor a socioeconomic problem; It is also not only an “academic” problem; it is a complex problem that demands collaborative coordination between disciplines and sectors.

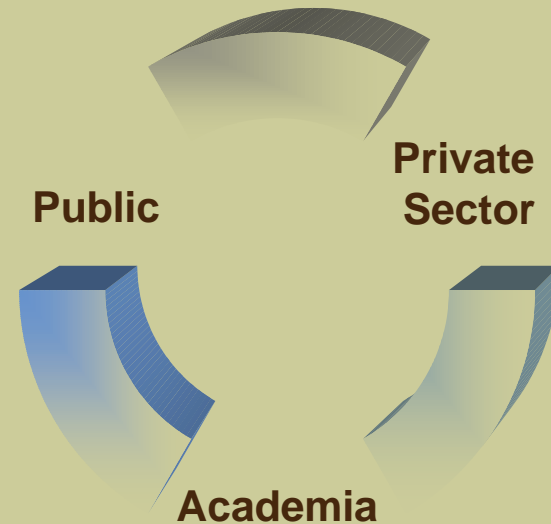
The Berkeley Water Center (BWC) has been developed to **integrate expertise across water-related disciplines in support of a new research mode for water investigations.**

Integration is necessary to Tackle Large Water Problems

Horizontal Integration across Expertise



Vertical Integration: Transfer of knowledge into application



The Berkeley Water Center will:

- Develop integrative water Research Thrust Areas ('Horizontal Integration');
- Accelerate thrust area results into applications ('Vertical Integration');
- Develop collaborations between water researchers and other expert groups;
- Create strong, mutually beneficial partnerships between Berkeley and other academic, governmental, and private sector institutions;



Modes of Operation

- BWC is a research development organization that is committed to funding multidisciplinary projects that have significant potential for impact and growth.
- BWC funding will be used to support
 - Working Groups
 - Seed projects
 - Doctoral students
 - Visiting scientists
- Projects will be chosen through RFP process and consideration of factors such as:
 - Alignment with the mission of the Research Thrust Area (RTA);
 - Potential for Growth and Impact
 - Multidisciplinary – potential for vertical and horizontal integration.
 - Potential for leveraging.



Research Thrust Areas (RTAs):

A tool for promoting and organizing multidisciplinary research

- Represent **broad arenas of inquiry** in which cross-cutting collaboration and cooperation are likely to produce significant progress;
- **Reflect the needs and interests** of the water community and BWC partners, and

RTAs are being developed with ancillary topics and questions designed to help the research community orient their research efforts in support of the RTA efforts and to assist the Center in mapping strategic synergies.